El

of PCR reactions yielded a PCR product that consisted of the human FRs present in the starting reshaped human V region and the CDRs present in mouse PM-1 V region (see Example 7, and Figures 7 and 8). The PCR products were cloned and sequenced to ensure that the entire DNA sequence of version "a" of reshaped human PM-1 L and H chain V region coded for correct amino acid sequence (SEQ ID NO: 64).

On page 26, delete the second full paragraph, and replace this paragraph with the following in accordance with 37 C.F.R. §1.121. A marked up version showing changes is attached:

The DNA and amino acid sequences of the final 20 versions of reshaped human PM-1 L and H chain V regions, as altered to improve expression levels, are shown in SEQ ID NOS: 67 and 68 and SEQ ID NOS: 65 and 66. These DNA sequences code for version "a" of the reshaped human PM-1 L chain V region as shown in Table 2 and version "f" of the reshaped human PM-1 H chain V region as shown in Table 3. When inserted into the HEF-lα expression vectors (Figure 15), these vectors transiently produce approximately 2 μg/ml of antibody in transfected cos cells. In order to stably produce larger amounts of reshaped human PM-1 antibody, a new HEF-lα expression vector incorporating the dhfr gene was constructed (see Example 10, Fig. 11). The "crippled" dhfr gene was introduced into the HEF-lα vector expressing human gamma-1 H chains as was described for the HCMV vector expressing human gamma-1 H chains. The HEF-lα vector expressing reshaped, human PM-1 L chains and the HEF-lα-dhfr vector expressing reshaped human PM-1 H chains were co-transfected into CHO dhfr(-) cells.

On page 36, delete the second full paragraph, and replace this paragraph with the following in accordance with 37 C.F.R. §1.121. A marked up version showing changes is attached:

In a preferred embodiment, the L chain CDRs have amino acid sequences shown in any one of SEQ ID NOS: 25, 29, 33 and 37 wherein the stretches of the amino acid sequences are defined in Table 9; the H chain CDRs have amino acid sequences shown in any one of SEQ ID NOS: 27, 31, 35 and 39 wherein the stretches of the amino acid sequences are defined in Table 9; human L chain FRs are derived from the REI; and human H chain FRs are derived from the NEW or HAX.

On page 43, delete Table 8, and replace this Table with the following in accordance with 37 C.F.R. §1.121. A marked up version showing changes is attached:



Table 8

Plasmid	SEQ. ID NO	Accession No.
p12-k2	24	NCIHB 40367
p12-h2	26	NCIMB 40363
pPM-k3	28	NCIHB 40366
pPM-h1	30	NCIHB 40362
p64-k4	32	NCIMB 40368
p64-h2	34	NCIHB 40364
p146-k3	36	NCIMB 40369
p146-h1	38	NCIHB 40365

On page 44, delete Table 9, and replace this Table with the following in accordance with 37 C.F.R. §1.121. A marked up version showing changes is attached:

			Table 9		
	plasmid	SEQ ID NO	CDR(1)	CDR(2)	CDR(3)
				(Amino acid No.)	
	p12-k2	24	24-38	54-60	93-101
	p12-h2	26	31-35	50-66	99-105
	pPM-k3	28	24-34	50-56	89-97
	pPM-h1	30	31-36	51-66	99-108
	p64-k4	32	24-38	54-60	93-101
	p64-h2	34	31-35	50-66	99-109
	p146-k3	36	24-34	50-56	89-97
	p146-h1	38	31-35	50-66	99-106



Atty. Dkt. No. 053466/0234

On page 65 and bridging page 66, delete the last full paragraph, and replace this paragraph with the following in accordance with 37 C.F.R. §1.121. A marked up version showing changes is attached:

RVh-PM1f-4 was constructed by replacing the HindIII-BamHI fragment of RVh-PM1f with the HindIII-BamHI fragment excised from pUC-RVh-PM1f-4. Sequence of reshaped human PM-1 antibody L chain V region version "a" wherein introns have been deleted is shown in SEQ ID NOS: 67 and 68, and sequence of reshaped human PM-1 antibody H chain V region version "f" wherein have been deleted is shown in SEQ ID NOS: 65 and 66.

On page 68, delete the second full paragraph, and replace this paragraph with the following in accordance with 37 C.F.R. §1.121. A marked up version showing changes is attached:

The second PCR product of 558 bp length containing an L chain V region into which CDRs of the mouse monoclonal antibody AUK 12-20 L chain had been grafted was purified by a 2.0% low melting agarose gel, and after digestion with BamHI and HindIII, subcloned into a pUCl9 vector to obtain pUC-RLL-1220a, and sequenced. A resulting amino acid sequence of the L chain V region and a nucleotide sequence encoding the amino acid sequence is shown in SEQ ID NOS: 82 and 83.

On page 73, delete the second full paragraph, and replace this paragraph with the following in accordance with 37 C.F.R. §1.121. A marked up version showing changes is attached:

Note, an amino acid sequence of the reshaped human AUK 12-20 antibody H chain V region version "b" and a nucleotide sequence coding therefor in the plasmid pUC-RV_H-1220b is shown in SEQ NOS. 97 and 96; and an amino acid sequence of the reshaped human AUK 12-20 antibody H chain V region version "d" and a nucleotide sequence coding therefor in the plasmid pUC-RV_H-1220d is shown in SEQ ID NOS: 99 and 98.

